



Minutes of DMAFB Alternative Energy Solutions Task Force Meeting

Date of Meeting: September 13, 2007

The Davis Monthan Air Force Base Alternative Energy Solutions (DMAFB AES) Task Force met in regular session in the Tucson Parks and Recreation Mesquite Room at 900 S. Randolph Way, Tucson, AZ, on Tuesday, September 13, 2007.

1. ROLL CALL

Valerie Rauluk, the chair, called the meeting to order at 8:10 a.m. and upon roll call, those present were:

Members present: Steve Anderson, Mike Block, Sally Gestautas, Ursula Kramer, Joan Lionetti, Valerie Rauluk, Mike Toriello, and Roger Watson. (Sue Keith arrived at 8:17 a.m., after the calling of roll.)

Members absent: Paul Huddy, Glenn Schrader, Randy Smith (Excused), Art Fregoso (Excused).

Guests/Staff Present: Margaret Bowman, Bob Carranza (Davis Monthan), Andrew Quigley, Doug Crockett, Mike Jones, David Bell, and Norma Stevens, City of Tucson; Maximiliano Torres (Ward 4) and Miguel Ortega (Ward 3); Tamarack Little and Lynne Gillette.

2. REVIEW OF MINUTES (ACTION)

A motion to accept the minutes from the August 9th meeting was made by Roger Watson and seconded by Steve Anderson; motion passed unanimously. Roger Watson next moved that the minutes from the August 21st meeting be approved as amended with the addition of "Discussion of inquiry to Mayor and Council on objectives" under the Administrative section; seconded by Steve Anderson and passed unanimously.

3. ADMINISTRATIVE

a. Announcements

Doug Crockett announced that staff from the U.S. Department of Energy recently met with Davis Monthan staff to discuss possible funding options for the proposed 200 kW PV system to power lights for the airplane shade structures at the base.

Also, as part of the American Solar Cities grant funding, the City will be hiring a full time solar energy coordinator to increase solar installations with the City and also with the surrounding jurisdictions.

On September 12 the City dedicated the Thornydale Reclaimed Water Site, completing the third phase of a PV system (74 kW). This qualifies as the largest municipal-owned solar energy generating station in Arizona.

Crockett reminded the task force that the Alternative Energy Expo is being held Friday and Saturday, September 14 and 15, sponsored by PAG.

Mike Toriello announced that Bob Carranza has taken a position as the lead energy engineer for the Veteran's Administration.

4. NEW BUSINESS

- a. Andrew Quigley, Director of Environmental Services for the City of Tucson, presented his department's perspective on waste-to-energy and why it's not the best way to make energy. Although it can provide a good base load and burning trash is a way to produce reliable power, the cost to build and operate a plant is costly. Three hundred tons of trash per day would be required to make 8 megawatts of energy at \$23 a ton. The internal cost to the City is \$14-15 per ton. Mr. Quigley does not believe it is in the interest of the City of Tucson to offer its waste to the project (since the existing landfill has a 60 year life and plenty of capacity) and is unclear where else such waste tonnage could come from for a WTE project. Other technologies like chemical biological treatment could be an alternative but isn't really done in the United States. Quigley added that no waste-to-energy plants have been built in the last 10 years.

Sally Gestautas added that should a private entity come in and build a plant, they would need to make it economically viable for themselves. Quigley agreed and added that they'd have to get a return of maybe 20-25% on their money. Charging more for power or charging for the feedstock would do this, plus the market price must be considered before entering into a venture such as waste-to-energy.

Note: Disposal is 25% of the cost of waste collection services.

Michael Toriello announced that DM would probably do an RFI (Request for Interest) to see what companies might be interested and maybe vary the size of the plant. Mr. Quigley suggested that DMAFB might be best served to have a financial analysis conducted by an outside person before moving forward with an RFI or RFQ. He also pointed out that WTE discussion might change if the U.S. moves to a carbon based system where the methane production from the landfill might be more effectively captured by other means. Valerie Rauluk suggested an RFI for all renewable technologies might be useful.

- b. Evaluation Process (ACTION)

Valerie Rauluk recommended the task force members review each technology, hold a discussion, tally up their individual votes (may be anonymous), and average the votes. The steps are:

1. Anonymous vote due Monday (10/8) prior to the next meeting.
2. Present straw poll before discussion.
3. Open discussion on evaluation.
4. Final individual votes.
5. Arrive at an average at the end of the discussion. (This may mean that the task force may only get through a portion of the criteria factors for that particular technology. Each technology may take half of a meeting between the voting process and discussion.)

So moved by Joan Lionetti and seconded by Sally Gestautas; motion passed unanimously.

5. OLD BUSINESS (ACTION)

a. Finalize Evaluation Mechanism

Sally Gestautas distributed the revised DRAFT Evaluation Criteria document for discussion purposes. Joan Lionetti moved to adopt the 9/12/07 version of the Weighting Factor Worksheet; seconded by Sally Gestautas. Discussion included Mike Block expressing concern that economics was not part of the initial screening criteria. Block preferred having a non-weighted score that determines whether or not the technology is chosen. Valeria Rauluk explained that economic viability is not a particularly straightforward factor. The purpose of setting up such a detailed mechanism is so that as the aspects become clear, an initial cut is not made as a result of a sole element of that technology. This initial screening is broader. Block added that the resource may be available but is not economical. What does “available” mean, asked Block. Gestautas answered, “Do we have bio-gas, ocean currents, sun light, or wind available from a simplistic viewpoint?” Gestautas worried that the greater the detail of evaluation done for an initial screening, the more difficult the task becomes. What obviously will work and what won’t? Block preferred that, should the economics not be feasible using the criteria, then the technology does not move forward. Block revised the motion that the 9/12 Evaluation Elements be used as a guide following the initial screening contained in the DRAFT Evaluation Criteria. Rauluk clarified that Block’s recommendation would mean that the task force begin with the highest weighting factors while working through the evaluation process. This will be one of a series of things that will be further discussed and voted on in terms of how this evaluation is going to be implemented. Motion passed unanimously.

Ursula Kramer reported for the Criteria Compilation working group. Members Art Fregoso, Margaret Bowman, Sally Gestautas, and Ursula Kramer met to review the DRAFT Evaluation Criteria. Kramer introduced the changes the working group came up with, and the members suggested numerous other additions and edits. Some of the changes included an introduction, adding 8 MW base load requirements and 8 MW peak under the **User’s Guide**, removal of “Cost-Hedge Capability” under **Economics – Community**, revising the column, “Capital Cost per MW” under **Economics – DM**, removing the column, “Energy Surety,” on **Health Safety and Security** and substituting “sustainable access to feedstock.” Sally Gestautas will make the changes, and a revised version will be made available to the task force members prior to the next meeting. Sally Gestautas moved to accept the evaluation mechanism, “DRAFT Evaluation Criteria,” seconded by Roger Watson. Motion passed unanimously.

d. Identifying Additional Evaluation Meetings

Additional meetings on October 18 (1:00 – 4:00 PM) and 25 (8:00 – 11:00 AM) will be scheduled to work on the criteria factors for each of the technologies discussed.

6. CALL TO THE AUDIENCE

There was none.

7. AGENDA ITEMS FOR NEXT MEETING

Initial screen for technologies

Working group activities

Presentation to Mayor and Council

ADJOURNMENT

Meeting adjourned at 10:15 a.m.